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EXAMINER

GOFF II, JOHN L

ART UNIT

PAPER NUMBER

1733

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DATE MAILED: 09/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,328

Applicant(s)

POULAKIS, KONSTANTINOS

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "17" has been used to designate both the roll of coated fleece in Figure 3 and the uncoated silicon carrier in Figure 4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: On page 6, line 5 delete "beigung". Appropriate correction is required.

Claim Objections

3. Claim 10 is objected to because of the following informalities: It appears claim 10 should depend from claim 8. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation "the relevant wall part" in line 3. There is insufficient antecedent basis for this limitation in the claim.

7. In claim 1, the phrase "relevant wall part" is unclear and confusing. It is uncertain what is meant by "wall part". It appears the "wall part" is the surface of the mold in contact with the barrier layer (fleece). It is suggested to change "relevant wall part" to - - mold wall - -. This issue should be clarified and reworded as appropriate.

8. In claim 1, lines 2-4 the phrase "in which a layer of a material which during the foaming process is forming a barrier layer between the foam material and the relevant wall part is embedded therein" is confusing. It is suggested to change "in which a layer of a material which during the foaming process is forming a barrier layer between the foam material and the relevant wall part is embedded therein" to - - in which a layer of material, the material acting as a barrier layer between the foam padding and a mold wall, is embedded therein - -.

9. In claim 1, line 7 the phrase "cooperating with the ferromagnetic coating" is confusing. It appears the magnetic field attracts the ferromagnetic coating. It is suggested to change "cooperating with the ferromagnetic coating" to - - attracting the ferromagnetic coating - -.

10. Claim 6 recites the limitation "the easily spreadable material" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change "the easily spreadable material" to - - the ferromagnetic coating - -.

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11. Claim 6 recites the limitation "the applicator" in line 3. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change "the applicator" to - - an applicator - -.

12. Claim 8 recites the limitation "the silicon-coated carrier" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change "the silicon-coated carrier" to - - a silicon-coated carrier - -.

13. Claim 9 recites the limitation "the strip of the coated fleece" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change "the strip of the coated fleece" to - - the coated fleece - -.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Black (U.S. Patent 4,784,890).

Black is directed to attaching a fastener assembly to a foam element wherein during foaming the assembly is imbedded into the foam element (Figures 1-3). Black teaches a fastener assembly comprising a fleece material and polyolefin attachment layer (Figure 1 and Column 3, lines 9-33 and 44-65 and Column 4, lines 17-35). The attachment layer includes a ferromagnetic coating (Figure 1 and Column 1, lines 37-43 and Column 3, lines 34-39 and 44-65). Black

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teaches placing the assembly in a mold containing magnets and then foaming to imbed the assembly (Figure 2 and Column 5, lines 14-30). Black teaches that attraction between the magnets and the ferromagnetic attachment layer hold the assembly in place and prevent foam from fouling the outer surface of the assembly (Column 4, lines 58-68 and Column 5, lines 1-2, 20-25, and 30-36). Black further teaches a method for applying the ferromagnetic coating comprising mixing the ferromagnetic particles with a polymeric component and solvent, applying the coating directly onto the polyolefin attachment layer, and drying the coated layer to remove the solvent (Column 3, lines 44-65).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1-7, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Specification page 1) in view of Black (U.S. Patent 4,784,890), Ladney (U.S. Patent 3,759,644), and Kenney et al. (U.S. Patent 5,725,928).

The admitted prior art is directed to known foaming processes. The admitted prior art teaches that it was known in the art to attach a barrier layer to a foam element during foaming. The admitted prior art teaches that the barrier layer is placed on the surface of a mold and foaming occurs thereon. The admitted prior art teaches that the barrier layer simplifies removal of the foam element from the mold and prevents caking or baking of the foam onto the mold.

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The admitted prior art notes that during foaming there is a danger of the barrier layer being displaced leading to surface defects in the foam element produced (Specification page 1, lines 7-15). It is a well-known technique in the art to provide the barrier layer with a ferromagnetic coating and to provide the mold with magnets to ensure that the barrier layer is not displaced during foaming through the attraction of the ferromagnetic coating and the magnets as shown for example by Black, Ladney, and Kenney et al. One of ordinary skill in the art at the time the invention was made reading the admitted prior art in view of Black, Ladney, and Kenney et al. would have readily appreciated modifying the method taught by the admitted prior to incorporate the well known magnetic attachment process (ferromagnetic coating on the barrier layer and magnets on the mold) shown for example by Black, Ladney, and Kenney et al. to ensure the barrier layer is not displaced during foaming.

As noted above, Black is directed to attaching a fastener assembly to a foam element wherein during foaming the assembly is imbedded into the foam element (Figures 1-3). Black teaches a fastener assembly comprising a fleece material and polyolefin attachment layer (Figure 1 and Column 3, lines 9-33 and 44-65 and Column 4, lines 17-35). The attachment layer includes a ferromagnetic coating (Figure 1 and Column 1, lines 37-43 and Column 3, lines 34-39 and 44-65). Black teaches placing the assembly in a mold containing magnets and then foaming to imbed the assembly (Figure 2 and Column 5, lines 14-30). Black teaches that attraction between the magnets and the ferromagnetic attachment layer hold the assembly in place and prevent foam from fouling the outer surface of the assembly (Column 4, lines 58-68 and Column 5, lines 1-2, 20-25, and 30-36). Black further teaches a method for applying the ferromagnetic coating comprising mixing the ferromagnetic particles with a polymeric component and solvent,

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applying the coating directly onto the polyolefin attachment layer, and drying the coated layer to remove the solvent (Column 3, lines 44-65). Ladney is directed to a method for attaching inserts to foam parts. Ladney teaches that it was known in the art to coat the inserts with a ferromagnetic coating and to include magnets within the mold to hold the insert in its intended position during foaming (Column 1, lines 7-21). Kenney et al. are directed to attaching a fastener assembly to a foam element (Figures 1-6 and Column 1, lines 18-22). Kenney et al. teach a base of the assembly formed of polymeric materials including polyester and polyurethane (Column 2, lines 62-67 and Column 3, lines 1 and 5-11). Kenney et al. teach including ferromagnetic particles within the base or coating the base with a ferromagnetic coating that comprises ferromagnetic particles and polymeric materials including polyester and polyurethane (Column 3, lines 5-13 and 22-27 and Column 4, lines 1-3 and Column 6, lines 55-65). Kenney et al. teach placing the assembly with the ferromagnetic coating into a mold wherein the mold includes magnets to secure the assembly in place (Column 5, lines 20-27). Kenney et al. teach that the attraction between the ferromagnetic coating and the magnets keep the assembly stationary and prevent the molding material from fouling the outer surface of the assembly (Column 5, lines 33-36).

Regarding claims 2-5, as noted above the barrier layer may comprise fleece and polyolefins, and the ferromagnetic coating may comprise ferromagnetic particles and polyurethane. However, the specific amounts of each would depend upon the desired end use of the foam element with imbedded fastener, and one of ordinary skill in the art would be readily expected to determine the desired amounts without undue experimentation.

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18. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art, Black, Ladney, and Kenney et al. as applied above in paragraph 17, and further in view of Persoon (U.S. Patent 2,909,442) and Chebiniak (U.S. Patent 3,497,411).

The admitted prior art, Black, Ladney, and Kenney et al. teach all of the limitations in claims 8 and 10 as applied above except for a teaching on using a transfer ribbon to apply the ferromagnetic coating to the barrier layer. However, it is well known in the art to use a transfer ribbon to apply a coating to a substrate as a means for controlling the width and thickness of the coating as shown for example by Persoon and Chebiniak. One of ordinary skill in the art at the time the invention was made would have readily appreciated coating the barrier layer taught by the admitted prior art as modified by Black, Ladney, and Kenney et al. using the well known transfer process as shown for example by Persoon and Chebiniak to control the width and thickness of the coating.

Persoon is directed to applying a magnetic coating to a film. Persoon teaches applying the coating to a transfer carrier ribbon, laminating the transfer ribbon to the film using heat and pressure, and separating the ribbon and film to obtain a film with a magnetic coating of a desired thickness and width (Figures 1-3 and column 1, lines 43-48 and 55-57 and Column 2, lines 18-62). Chebiniak is directed to applying a magnetic coating to a substrate. Chebiniak teaches applying the coating to a transfer carrier substrate, laminating the transfer substrate to the end use substrate using heat and pressure, and separating the two substrates to obtain a substrate with a smooth magnetic coating (Column 1, lines 15-26, 37-38, 51,52, and 63-64 and Column 2, lines 11-14, 45-50, and 55-60). Chebiniak further teaches that the carrier substrate may incorporate a silicon lubricating substance (Column 3, lines 68-73).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Black et al. (U.S. Patent 4,563,380) are directed to attaching a fastener assembly to a foam element wherein during foaming the assembly is imbedded into the foam element (Figures 1-4). Black et al. teach that the assembly includes a ferromagnetic coating and the mold includes magnets to ensure the assembly remains stationary during foaming. Ogawa et al. (U.S. Patent 4,931,344) are directed to attaching a fastener assembly to a foam element during foaming wherein the assembly includes a metal substrate and the mold includes magnets to ensure the assembly remains stationary (Figure 6). Sherman et al. (U.S. Patent 4,941,236) are directed to using ferromagnetic materials as attachment members (Column 2, lines 55-57). Peronnet et al. (U.S. Patent 4,273,603) are directed to a film with a magnetic coating wherein the coating is applied to the end use film using a transfer film (Figure 1 and Column 1, lines 25-28 and Column 2, lines 3-8). Peronnet et al. teach that the coating may comprise polyurethane and ferromagnetic particles, and the end use film may comprise polyester (Column 2, lines 68-68 and Column 3, lines 1-11 and Column 5, lines 53-58).

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

John L. Goff

John L. Goff
September 11, 2002

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